

What is claimed is:

1. The use of a TFF3 neutralizing agent in the preparation of a medicament for the treatment or prevention of cancer.
2. The use of claim 1 wherein said TFF3 neutralizing agent comprises a nucleic acid.
3. The use of any of claims 1 and 2 wherein said cancer is breast, colon, prostate, ovarian, or gastric cancer.
4. The use of any of claims 1-3 wherein TFF3 is differentially expressed in cells of said cancer.
5. The use of claim 1 wherein said neutralizing agent comprises an antisense molecule.
6. The use of claim 5 wherein said antisense molecule comprises or overlaps a sequence of any of SEQ ID NOs: 5-19.
7. The use of claim 1 wherein said neutralizing agent comprises an RNAi molecule.
8. The use of claim 7 wherein said RNAi molecule comprises or overlaps with a sequence corresponding to any of SEQ ID NOs: 5-19.
9. The use of claim 1 wherein said TFF3 neutralizing agent comprises an antibody which specifically binds to TFF3.
10. The use of claim 1 wherein said cancer is not colon or prostate cancer.
11. The use of a TFF3 neutralizing agent in the preparation of a medicament for the treatment or prevention of cancer, said medicament used in combination with a traditional cancer treatment.

12. The use of claim 11 wherein said traditional cancer treatment is chemotherapy.
13. The use of claim 11 wherein said traditional cancer treatment is hormone ablation therapy.
14. The use of claim 13 wherein said hormone is an androgen.
15. The use of a TFF3 neutralizing agent in the preparation of a medicament for the modulation of apoptosis in a cell.
16. The use of claim 15 wherein said cell is mammalian.
17. The use of claim 15 wherein said cell is cancerous.
18. The use of claim 15 wherein said cell is a breast, prostate, colon, ovarian, or gastric cell.
19. The use of a TFF3 neutralizing agent in the preparation of a medicament for the inhibition of tumor growth or for the reduction of tumor volume.
20. The method of claim 19 wherein said tumor comprises cells in which TFF3 is differentially expressed.
21. The use of a TFF3 neutralizing agent in the preparation of a medicament for the modulation of at least one physiological effect associated with expression of TFF3 in a cell.
22. The use of claim 21 wherein said physiological effect is increased cell motility or resistance to apoptosis.
23. The use of a TFF3 neutralizing agent in the preparation of a medicament for the inhibition of migration, adhesion, or proliferation of a cell.

24. The use of a TFF3 neutralizing agent in the preparation of a medicament for the reduction of invasiveness of a cancer cell.
25. The use of a TFF3 neutralizing agent in the preparation of a medicament for the modulation of TFF3 expression in a cell.
26. A method of detecting TFF3 in a biological sample comprising contacting said sample with a TFF3 neutralizing agent and detecting binding between said neutralizing agent and TFF3 in said sample.
27. A method for detecting the presence of cancer in a biological sample comprising: contacting said biological sample with a TFF3 neutralizing agent and detecting evidence of differential expression of TFF3 in said biological sample, wherein evidence of differential expression of TFF3 is indicative of the presence of cancer.
28. The method of claim 27 wherein said detecting comprises comparing the results of said contacting with a control.
29. A method for determining the susceptibility of a patient to a TFF3 neutralizing agent comprising detecting evidence of differential expression of TFF3 in said patient's cancer sample, wherein evidence of differential expression of TFF3 is indicative of the patient's susceptibility to said TFF3 neutralizing agent.
30. The method of claim 28 wherein said evidence of differential expression of TFF3 is upregulation of TFF3 in said patient's cancer sample.
31. The method of claim 28 wherein said patient's cancer sample is from breast, prostate, colon, ovarian, or gastric tissue.
32. A method for assessing the progression of cancer in a patient comprising comparing the expression of TFF3 in the patient at a first time point to the expression of

TFF3 at a second time point, wherein increased expression of TFF3 at the second time point relative to the first time point is indicative of progression of said cancer.

33. The method of claim 30 wherein said increased expression of TFF3 is increased expression of at least about 25%.

34. A method for detecting an increased risk of metastasis of a cancer in a patient comprising comparing the expression of TFF3 in the patient at a first time point to the expression of TFF3 at a second time point, wherein increased expression of TFF3 at the second time point relative to the first time point is indicative of said increased risk of metastasis.

35. The method of any of claims 1-34 wherein said TFF3 neutralizing agent comprises a detectable label.

36. The method of any of claims 1-35 wherein the TFF3 neutralizing agent comprises a radiolabel.

37. The use of any of claims 11-36 wherein said TFF3 neutralizing agent comprises an antibody, nucleic acid, antisense molecule, or RNAi molecule.

38. An antisense molecule that modulates expression of TFF3.

39. The antisense molecule of claim 38 wherein said antisense molecule comprises or overlaps a sequence of any of SEQ ID NOs: 5-19.

40. The antisense molecule of claim 38 comprising any of SEQ ID NOs: 5-19.

41. An RNAi molecule that modulates expression of TFF3.

42. The RNAi molecule of claim 41 wherein said RNAi molecule comprises or overlaps a sequence of any of SEQ ID NOs: 5-19.

43. A composition comprising an antisense molecule of claim 38 and a pharmaceutically acceptable carrier.
44. A composition comprising an RNAi molecule of claim 43 and a pharmaceutically acceptable carrier.
45. An isolated anti-TFF3 antibody, wherein said antibody recognizes at least one region of TFF3 sequence corresponding to SEQ ID NO: 20, 21, 22, 23, 24, 25, 26, 27 or 28.
46. The antibody of claim 47 wherein said antibody is produced by the process comprising:
 - a) synthesizing a library of antibodies on phage;
 - b) panning the library against a sample by bringing the phage into contact with a composition comprising at least one region of TFF3 sequence corresponding to SEQ ID NO: 20, 21, 22, 23, 24, 25, 26, 27 or 28;
 - c) isolating phage which bind said composition, wherein the antibody is characterized by its ability to bind to at least one region of TFF3 sequence corresponding to SEQ ID NO: 20, 21, 22, 23, 24, 25, 26, 27 or 28 with a binding affinity of at least 10^8 l/; and
 - d) analyzing the isolated phage to determine a sequence encoding an amino acid sequence to which the at least one region of TFF3 sequence corresponding to SEQ ID NO: 20, 21, 22, 23, 24, 25, 26, 27 or 28 binds.
47. The antibody of claim 45 wherein said antibody is a monoclonal antibody.
48. The antibody of claim 45 wherein said antibody is a polyclonal antibody.
49. The antibody of claim 45 wherein said antibody is a chimeric antibody.
50. The antibody of claim 45 wherein said antibody is a humanized antibody.
51. The antibody of claim 45 wherein said antibody is a single-chain antibody.

52. The antibody of claim 45 wherein said antibody is a Fab fragment.
53. The antibody of claim 45 wherein said antibody is labeled.
54. The antibody of claim 53 wherein said label is an enzyme, radioisotope, or fluorophore.
55. The antibody of claim 45 wherein the binding affinity of said antibody is less than about $1 \times 10^5 K_a$ for a polypeptide other than TFF3.
56. An isolated cell that produces the antibody of claim 45.
57. A hybridoma that produces the antibody of claim 45.
58. A composition comprising the anti-TFF3 antibody of claim 45 and a pharmaceutically acceptable carrier.
59. The use of a TFF3 neutralizing agent in the preparation of a medicament for the treatment or prevention of cancer wherein the neutralizing agent is the antibody of claim 45.
60. The use of a TFF3 neutralizing agent in the preparation of a medicament for the treatment or prevention of cancer, said medicament used in combination with a traditional cancer treatment, wherein the TFF3 neutralizing agent is the antibody of claim 45.
61. The use of claim 60 wherein said traditional cancer treatment is chemotherapy.
62. The use of claim 60 wherein said traditional cancer treatment is hormone ablation therapy.
63. The use of claim 62 wherein said hormone is an androgen.

64. The use of a TFF3 neutralizing agent in the preparation of a medicament for the induction of apoptosis, wherein said neutralizing agent is the antibody of claim 45.
65. The method of claim 64 wherein said cell is mammalian.
66. The use of claim 64 wherein said cell is cancerous.
67. The use of a TFF3 neutralizing agent in the preparation of a medicament for the reduction of tumor volume, the prevention of tumor growth, or the inhibition of tumor growth, wherein said TFF3 neutralizing agent is the antibody of claim 45.
68. The use of claim 67 wherein said tumor comprises cells in which TFF3 is differentially expressed.
69. The use of a TFF3 neutralizing agent in the preparation of a medicament for the modulation of at least one physiological effect associated with expression of TFF3 in a cell wherein said TFF3 neutralizing agent is the antibody of claim 45.
70. The use of claim 69 wherein said physiological effect is increased cell motility or resistance to apoptosis.
71. The use of a TFF3 neutralizing agent in the preparation of a medicament for the inhibition of the migration, adhesion, or proliferation of a cell wherein said TFF3 neutralizing agent is the antibody of claim 45.
72. The use of a TFF3 neutralizing agent in the preparation of a medicament for the reduction of invasiveness of a cancer wherein said TFF3 neutralizing agent is the antibody of claim 45.
73. A method of detecting TFF3 in a biological sample comprising contacting said sample with the antibody of claim 45 and detecting binding between said neutralizing agent and TFF3 in said sample.

74. The method of claim 73 wherein said TFF3 neutralizing agent comprises a detectable label.
75. A method for detecting the presence of cancer in a biological sample comprising: contacting said biological sample with the antibody of claim 45 and detecting evidence of differential expression of TFF3 in said biological sample, wherein evidence of differential expression of TFF3 is indicative of the presence of cancer.
76. The method of claim 75 wherein said detecting comprises comparing the results of said contacting with a control.
77. The method of claim 75 wherein said TFF3 neutralizing agent comprises a detectable label.
78. An isolated polypeptide comprising three or fewer amino acid sequences selected from SEQ ID NOs: 20, 21, 22, 23, 24, 25, 26, 27 or 28.
79. The peptide of claim 78 wherein said polypeptide is from about 8 to about 80 amino acids in length.
80. The peptide of claim 78 wherein said polypeptide binds specifically to an anti-TFF3 antibody.
81. A method of using an antibody to detect differential expression of TFF3 in a sample comprising:
- combining the antibody of claim 45 with said sample under conditions which allow the formation of antibody:TFF3 complexes;
 - measuring the amount of said complexes; and
 - comparing the amount of said complexes to a control, wherein elevated levels of complex in said sample indicates differential expression of TFF3.
82. An isolated epitope-bearing fragment of the polypeptide of SEQ ID NO:1-4.

83. The epitope-bearing fragment of claim 82, which consists of between about 6 and about 20 contiguous amino acids of SEQ ID NO:1-4.
84. The epitope-bearing fragment of claim 83, which consists of about 10 contiguous amino acids of SEQ ID NO:1-4.
85. The epitope-bearing fragment of claim 82, which consists of between about 6 and about 20 contiguous amino acids of SEQ ID NO:2.
86. The epitope-bearing fragment of claim 83, which consists of about 10 contiguous amino acids of SEQ ID NO:2.
87. The epitope-bearing fragment of claim 83 which comprises SEQ ID NO: 20, 21, 22, 23, 24, 25, 26, 27 or 28.
88. An isolated anti-TFF3 antibody which is obtained by immunization of a subject with the epitope-bearing fragment of claim 83.
89. A pharmaceutical composition comprising the antibody of claim 45 and a pharmaceutically acceptable carrier.
90. The pharmaceutical composition of claim 89 wherein the antibody neutralizes TFF3.
91. A method for generating an antibody for the treatment of cancer comprising identifying an antibody that binds to and neutralizes TFF3, and expressing the antibody in a recombinant expression host cell.
92. A pharmaceutical composition comprising an antibody that binds to and neutralizes TFF3, wherein the antibody was generated using a recombinant host cell, and a pharmaceutically acceptable carrier.

93. The pharmaceutical composition of claim 92 wherein the recombinant host cell is selected from the group consisting of Chinese Hamster Ovary cell, myeloma cell and bacterial host cell.